



# SARANEX 27E

## Coextruded Barrier Film

SARANEX® 27E coextruded barrier film is a four-layer film of an ethylene vinyl acetate (EVA)/Saran® resin/tie/low density polyethylene (LDPE) structure. Available in customized slit widths.

| Physical Properties                                    |    | Test Method | Imperial Values                     | Metric Values                                |
|--|----|-------------|-------------------------------------|--|
| Thickness  |    | ASTM D 374  | 4 mil                               | 100 µm                                       |
| Yield (Area Factor)                                    |    | ASTM D 4321 | 6678 in <sup>2</sup> /lb            | 9.5 m <sup>2</sup> /kg                       |
| Ultimate Tensile Strength                              | MD | ASTM D 882  | 2485 psi                            | 17 N/mm <sup>2</sup>                         |
|  | TD |             | 1885 psi                            | 13 N/mm <sup>2</sup>                         |
| Tensile Elongation at Break                            | MD | ASTM D 882  | 350%                                | 350%   |
|  | TD |             | 350%                                | 350%   |
| Heat Seal Strength,<br>2 Bar, 1.5 sec, 356°F (180°C)   | MD | ASTM F 88   | 6.3 lb/in seal width                | 28 N/25.4 mm seal width                      |
|  | TD |             | 5.8 lb/in seal width                | 26 N/25.4 mm seal width                      |
| Oxygen Transmission Rate,<br>73°F (23°C)               |    | ASTM D 3985 | 0.2 cc/100 in <sup>2</sup> /day/bar | 3.5 cm <sup>3</sup> /m <sup>2</sup> /day/bar |
| Water Vapor Transmission Rate,<br>100°F (38°C), 90% RH |    | ASTM E 398  | 0.1 g/100 in <sup>2</sup> /day      | 1.6 g/m <sup>2</sup> /day                    |
| Coefficient of Friction (kinetic), PE/PE               |    | ASTM D 1894 | 0.20-0.40                           | 0.20-0.40                                    |

(1) Values are typical laboratory averages. They are intended as guides only and are not sales specifications.

– See "Handling Considerations" reverse side.

## Handling and Safety Considerations

Material Safety Data (MSD) sheets are available from Dow to help customers/users further understand proper handling of the product.

This information should be requested and fully read and understood prior to handling or use of the product. The following general comments are made to provide readers with perspectives about health and safety concerns but are not a substitute for the detailed information on the Material Safety Data sheets nor for the customer's independent handling and disposal decisions.

### Health Hazards

As manufactured and supplied by Dow, SARANEX films pose no known toxicological hazard from ingestion, inhalation, skin or eye contact.

The most severe potential hazard associated with SARANEX films may occur when thermal degradation of the film (from fire, excessive heat in processing or with laminating or sealing equipment) causes release of various carbon oxides and hydrogen chloride fumes into the air.

Workers should be protected from possible inhalation exposure by providing adequate ventilation and fresh air supply in work areas where thermal decomposition could occur.

A safe working environment is the responsibility of the user-converter. However, resources from Dow are available to assist customers with pertinent data and other information.

### Combustion Characteristics

SARANEX films will burn under the right conditions of heat and oxygen supply and in burning may contribute high fuel value. Products of combustion include carbon compounds and oxides, water, and hydrogen chloride. Fumes of hydrogen chloride are corrosive and irritating; they are toxic under conditions of high concentration and/or prolonged human exposure.

Fires can be extinguished by conventional means, with water fog preferred. Fire fighters should be protected from inhalation of hydrogen chloride and other products of combustion by use of self-contained breathing apparatus. Eye and skin exposure should be prevented by wearing a full face mask and protective clothing.

### Disposal Information

Scrap or waste of SARANEX films can be disposed of by burial in an approved landfill or by burning in an approved scrubber-equipped incinerator.

In landfill, this film is highly stable and does not evolve gases or leachates known to pollute water resources.

If waste of SARANEX films are incinerated, they should constitute less than 10% of the total materials charged to the incinerator. Effluent gases should be scrubbed to avoid hydrogen chloride contamination of the air.

*In any disposal of wastes, be certain that all applicable regulations are met.*

### Customer Notice

Dow encourages its customers and potential users of Dow products to review their applications of such products from the standpoint of human health and environmental quality. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with ecological and product safety considerations. Your Dow salesperson can arrange the proper contacts. Dow product literature, including Material Safety Data sheets, should be consulted prior to use of Dow products. These may be obtained from your Dow sales representative.

NOTICE: No freedom from any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow's Fabricated Products business does not recommend any of its products, including samples, for use: (A) in any application which is intended for any internal contact with human body fluids or body tissues; (B) as a critical component in any medical device that supports or sustains human life; and (C) specifically by pregnant women or in any applications designed specifically to promote or interfere with human reproduction.

Published October 1999

Dow Europe Fabricated Products, Dow Deutschland Inc., Industriestraße, 1  
D-77836 Rheinfelden



Printed in U.S.A.

\*Trademark of The Dow Chemical Company.

Form No. 500-01797-1099 SMG  
1-12-99